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| EXAMINER | |
|---|---|
| HOSSAIN, FARZANA E | |

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| 2623 | |

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Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/933,928 | PELIOTIS ET AL. | |
| | Examiner | Art Unit | |
| | Farzana E. Hossain | 2623 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *04 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1,3-8,10-26,29-39,42-58 and 61-71* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-8,10-26,29-39,42-58 and 61-71* is/are rejected.

7)☒ Claim(s) *62* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 August 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

**1.** A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08-04-06 has been entered.

### *Response to Amendment*

2. This action is in response to communications filed 08-04-06. Claims 1, 14-19, 39, 42, 61, 63-65 are amended. Claims 3-8, 21, 25, 26, 29-32, 34-37, 56, 66-71 are previously presented. Claims are 2, 9, 27, 28, 40, 41, 59, 60 cancelled. Claims 10-13, 20, 22-24, 33, 38, 43-55, 57, 58, 62 are original.

### *Response to Arguments*

3. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

***Specification***

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

The markers are inserted into said video stream to indicate the division between video segments by changes in audio levels within said video stream.

The markers are inserted into said video stream to indicate the division between video segments by changes in light levels within said video stream.

The markers are inserted into said video stream to indicate the division between video segments by changes in color within said video stream.

The markers are inserted into said video stream to indicate the division between video segments by changes in music within said video stream.

The markers are inserted into said video stream to indicate the division between video segments by changes in scenery within said video stream.

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: The Selection or Exclusion of Video Segments Based on Tags, Markers and Video Preferences.

***Claim Objections***

6. Claim 62 is objected to because of the following informalities: Claim 62 recites step of inserting the viewer preferences comprises inserting key words are entered by the viewer that are compared to the tags to select and exclude the video segments. This claim should be clarified as the step of inserting involves inserting alternate video segments whereas the claim refers to using viewer preferences and inputted key words. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1, 5-7, 10, 11, 14-20, 22-24, 38, 39, 61, 62, 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis (US 6,011,895) in view of Legall et al (US 6,005,565 and hereafter referred to as "Legall").

Regarding Claims 1, 14, 15, 16, 17, 18, 19, 39, and 61, Abecassis discloses a system and method of selecting preferred video segments and excluding unwanted video segments from a plurality of video segments within a video stream (Column 7, lines 16-26) comprising: an encoder that encoding markers within the video stream

(Column 7, lines 28-67, Column 8, lines 1-26, 39-45), the markers having a position in the video stream that indicates a division between the plurality of segment of the video stream (Column 8, lines 39-45) and the encoder encodes tags within the video stream that indicated content of each video segment, the tags comprise selected key words relating to the content of the video stream (Column 7, lines 8-15, 28-67, Column 8, lines 1-26, 39-45) as the tags and markers are encoded for the video stream, a set top box (STB) that receives the encoded video stream and separates the tags and markers from the encoded video stream to generate an un-encoded video stream (Figure 5, 623, 622, 633); a video database, coupled to the STB , that stores the un-encoded video stream (Figure 5, 611, 612), and a comparator, coupled to the STB, that receives the tags and markers and video preferences (Figure 5, 621), which points to locations of video segments to select the preferred video segments and exclude the unwanted video segments by comparing key words with the video preference information of the viewer (Column 7, lines 8-26, Column 8, lines 39-52, Column 10, lines 10-16). Abecassis discloses storing video content at the viewer's premises in a local storage (Figure 5, 611, 612); downloading preferred video segments from the video content stored in the local storage for viewing by the viewer (Column 11, lines 1-15). Abecassis disclose a personal video recorder for filtering the video stream to provide video segments to be viewed by the viewer (Figure 5, 601, 631, 612, Column 10, lines 33-67, Column 11, lines 1-30). Abecassis discloses inserting alternate video segments that have been selected by the viewer to replace video segments that have been excluded by the viewer (Column 10, lines 10-16, Column 5, lines 5-12, Column 7, lines 8-26, Column 8,

lines 39-52). Abecassis discloses that the keywords based on the category or subject matter of segments in order to retrieve the segments (Column 7, lines 16-26). Abecassis is silent on the key words of video stream based on information from an electronic program guide (EPG). Legall discloses that the keywords or tags of a program are based on information from an EPG as a user allowed to search for programs or listings based on the keywords (Column 3, lines 28-55). Therefore, it would have been obvious to one of ordinary skill in the art to modify Abecassis to include that key words of video stream based on information from an EPG (Column 3, lines 28-55) as taught by Legall in order to provide a more efficient tool of allowing a user to search and watch items of interest (Column 1, lines 30-32) as disclosed by Legall.

Regarding Claim 5, Abecassis and Legall disclose all the limitations of Claim 1. Abecassis discloses that the video stream is automatically encoded with markers and tags within the video stream based upon detection of changes of scenes (Figure 3A).

Regarding Claim 6, Abecassis and Legall disclose all the limitations of Claim 1. Abecassis discloses selecting preferred video segments and excluding the unwanted video segments within a video stream comprises comparing key words are input by the viewer (Column 7, lines 8-26) such as flag burning.

Regarding Claim 7, Abecassis and Legall disclose all the limitations of Claim 1. Abecassis discloses that encoding tags within the video steam such as the topic (Column 7, lines 8-26). Legall discloses placing the information such as the topic from an EPG into the video stream (Column 3, lines 28-55).

Regarding Claim 10, Abecassis and Legall disclose all the limitations of Claim 1. Abecassis discloses that excluding the video segments by eliminating the excluded segment in the video stream (Column 7, lines 8-26, Column 5, lines 24-36) and proceeding to a selected video segment (Column 7, lines 8-26, Column 5, lines 24-36).

Regarding Claims 11, 69, 70, Abecassis and Legall disclose all the limitations of Claims 1, 1, and 14 respectively. Abecassis discloses that excluding the video segments by selecting the alternate video that replaces excluded segment in the video stream or parallel segment (Column 10, lines 10-16, Column 5, lines 5-12, Column 7, lines 8-26, Column 8, lines 39-52).

Regarding Claim 20, Abecassis and Legall disclose all the limitations of Claim 19. See rejection of Claim 39.

Regarding Claim 22, Abecassis and Legall disclose all the limitations of Claim 19. Abecassis discloses a filter/switch (Figure 1, 603) that uses comparison data to select and exclude un-encoded video stream (Column 11, lines 15-30)

Regarding Claim 23, Abecassis and Legall disclose all the limitations of Claim 19. Abecassis disclose the tags comprise content data relating to video segment (Column 7, lines 8-26).

Regarding Claim 24, Abecassis and Legall disclose all the limitations of Claim 19. Kwoh discloses that the tags comprise rating information of the video segment (Figures 1A-1C).

Regarding Claim 38, Abecassis and Legall disclose all the limitations of Claim 19. Abecassis discloses a viewer personalized remote control or input device (Figure 5,

655, 656, 657) that transmits the video preference information to the system (Figure 5, 651) and receives information from the system (Figure 5, 617).

Regarding Claim 62, Abecassis and Legall disclose all the limitations of Claim 61. Abecassis disclose the step of inserting the viewer preferences comprises inserting key words are entered by the viewer that are compared to the tags to select and exclude the video segments (Column 7, lines 8-26, Column 5, lines 24-36).

9. Claims 3, 8, 21, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Legall as applied to claim 1 above, and further in view of Kwoh (US 6,226,793).

Regarding Claim 3, Abecassis and Legall disclose all the limitations of Claim 1. Abecassis and Legall are silent on encoding tags and markers within the video stream comprise encoding tags and markers manually by a use of computer. Kwoh discloses a method of selecting preferred video segments and excluding unwanted video segments from a plurality of video segments within a video stream (Figure 26) comprising: encoding markers within the video stream (Column 13, lines 33-64, Figure 23, 664, 668 Figure 24, 684, 688, 693, 694), the markers having a position in the video stream that indicates a division between the plurality of video segments of the video stream (Figure 23, 664, 668 Figure 24, 684, 688, 693, 694); encoding tags within the video stream that indicate content of each video segment (Column 13, lines 33-64, Figure 21); using video preference information of the viewer to select the preferred video segments and exclude the unwanted video segments by comparing the tags with the video preference

information of the viewer (Figure 26). Kwoh discloses that step of encoding tags and markers within the video stream comprise encoding tags and markers manually by a use of computer (Figure 20, 10007). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Abecassis in view of Legall to include encoding tags and markers within the video stream comprise encoding tags and markers manually by a use of computer (Figure 20, 10007) as taught by Kwoh in order to provide parental control on all broadcasts and transmissions to a STB (Column 1, lines 14-16, 55-57) as disclosed by Kwoh.

Regarding Claim 8, Abecassis and Legall disclose all the limitations of Claim 1. Abecassis and Legall are silent on encoding tags and markers within the video stream comprise encoding tags and markers manually by a use of computer. Kwoh discloses a method of selecting preferred video segments and excluding unwanted video segments from a plurality of video segments within a video stream (Figure 26) comprising: encoding markers within the video stream (Column 13, lines 33-64, Figure 23, 664, 668 Figure 24, 684, 688, 693, 694), the markers having a position in the video stream that indicates a division between the plurality of video segments of the video stream (Figure 23, 664, 668 Figure 24, 684, 688, 693, 694); encoding tags within the video stream that indicate content of each video segment (Column 13, lines 33-64, Figure 21); using video preference information of the viewer to select the preferred video segments and exclude the unwanted video segments by comparing the tags with the video preference information of the viewer (Figure 26). Kwoh discloses a placing the tags and markers in the vertical blanking interval that separates the tags and makers from the regular video

stream (Column 14, lines 66-67, Column 15, lines 1-9). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Abecassis in view of Legall to a video blanking interval decoder that separates the tags and makers from the regular video stream (Column 14, lines 66-67, Column 15, lines 1-9) as taught by Kwoh in order to provide parental control on all broadcasts and transmissions to a STB (Column 1, lines 14-16, 55-57) as disclosed by Kwoh.

Regarding Claim 21, Abecassis and Legall disclose all the limitations of Claim 19. Abecassis and Legall are silent on a video blanking interval decoder that separates the tags and makers from the regular video stream. See rejection of Claim 3. Kwoh discloses a video blanking interval decoder that separates the tags and makers from the regular video stream (Figure 25, 706, 708). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Abecassis in view of Legall to a video blanking interval decoder that separates the tags and makers from the regular video stream (Figure 25, 706, 708) as taught by Kwoh in order to provide parental control on all broadcasts and transmissions to a STB (Column 1, lines 14-16, 55-57) as disclosed by Kwoh.

Regarding Claim 36, Abecassis and Legall disclose all the limitations of Claim 19. Abecassis and Legall are silent on encoding markers within the video stream during live transmission of the video stream and the key words of video stream based on information from an EPG. See rejection of claim 3. Kwoh discloses that the plurality of video segments in the video stream comprise a live broadcast signal that is sent to the STB at a viewer's premises (Column 13, lines 33-64). Therefore, it would have been

obvious to one of ordinary skill in the art at the time the invention was made to modify Abecassis in view of Legall to include the plurality of video segments in the video stream comprise a live broadcast signal that is sent to the STB at a viewer's premises (Column 13, lines 33-64) as taught by Kwoh in order to provide parental control on all broadcasts and transmissions to a STB (Column 1, lines 14-16, 55-57) as disclosed by Kwoh.

10. Claims 4, 33, 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Legall as applied to claim 1 above, and further in view of Maybury et al (US 6,961,954 and hereafter referred to as "Maybury").

Regarding Claims 4, 33, and 66, Abecassis and Legall disclose all the limitations of Claims 1, 19, and 19 respectively. Abecassis and Legall are silent on encoding tags and markers comprise encoding tags and markers automatically by use of voice recognition techniques. Maybury discloses encoding markers within a video stream (Column 9, lines 42-67, Column 10, lines 1-21, 34-48) which indicates a division between a plurality of segments (Column 9, lines 42-67, Column 10, lines 1-21, 34-48) by using voice recognition (Column 10, lines 33-40) and encoding tags comprising keywords (Column 16, lines 48-56) by using voice recognition (Column 18, lines 38-67). Therefore, it would have been obvious to one of ordinary skill in the art to modify Abecassis in view of Legall to include encoding markers (Column 9, lines 42-67, Column 10, lines 1-21, 34-48) by using voice recognition (Column 10, lines 33-40) and encoding tags (Column 16, lines 48-56) by using voice recognition (Column 18, lines

38-67) as taught by Maybury in order to provide a more efficient tool of allowing a user to catalog and search multimedia information which is more accurate (Column 1, lines 54-67) as disclosed by Maybury.

11. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Legall as applied to claim 1 above, and further in view of Elam (US 6,216,263).

Regarding Claim 12, Abecassis and Legall disclose all the limitations of Claim 1. Abecassis and Legall are silent on a blank slate being displayed. Elam discloses that the excluding of video segments will comprise displaying a blank slate during the excluding video (Column 2, lines 8-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Abecassis in view of Legall to exclude video segments by displaying a blank slate during the excluding video (Column 2, lines 8-30) as taught by Elam in order to provide parental control over the viewing by children of television programs (Column 1, lines 6-12) as disclosed by Elam.

12. Claim 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Legall as applied to claim 1 above, and further in view of Abecassis (US 5,664,046 and hereafter referred to as "Abecassis2").

Regarding Claim 13, Abecassis and Legall disclose all the limitations of Claim 1. Abecassis and Legall are silent on video games. Abecassis2 disclose that the step of

selecting and excluding video segment in a video stream further comprises selecting and excluding video segments in video games (Column 3, lines 49-67, Column 4, lines 1-4, 64-67, Column 5, 1-5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Abecassis in view of Legall to include selecting and excluding video segments in video games (Column 3, lines 49-67, Column 4, lines 1-4, 64-67, Column 5, 1-5) as taught by Abecassis2 in order to provide censoring capabilities in video games and programs so that children are not exposed to adult material (Column 3, lines 22-35) as disclosed by Abecassis2.

13. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Legall as applied to claim 19 above, and further in view of Eyer (US 6,483,547).

Regarding Claim 25, Abecassis and Legall disclose all the limitations of Claim 19. Abecassis and Legall are silent on the tags and markers being analog. Eyer discloses that the tags and markers are encoded as analog data in the video stream to generate the encoded video stream (Figure 1, 16). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Abecassis in view of Legall to encode tags and markers as analog data to generate the encoded video stream (Figure 1, 16) as taught by Eyer in order to use identification data to access information about the program (Column 2, lines 29-41) as disclosed by Eyer.

14. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Legall as applied to claim 19 above, and further in view of Beckman et al (US 6,675,388 and hereafter referred to as "Beckman").

Regarding Claim 26, Abecassis and Legall disclose all the limitations of Claim 19. Abecassis and Legall are silent on the tags and markers being digital. Beckman discloses that the tags and markers are encoded as digital data or that digital data is inserted into the VBI in the video stream to generate the encoded video stream (Column 4, lines 33-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Abecassis in view of Legall to encode tags and markers as digital data to generate the encoded video stream (Column 4, lines 33-35) as taught by Beckman in order to coordinate distribution of digital and analog broadcasts to receivers (Column 2, lines 1-11) as disclosed by Beckman.

15. Claims 29 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Legall as applied to claim 19 above, and further in view of Elenbaas et al (US 2005/0028194 and hereafter referred to as "Elanbaas").

Regarding Claim 29, Abecassis and Legall disclose all the limitations of Claim 19. Abecassis and Legall are silent on encoding tags and markers detecting changes in flesh tone. Elenbaas discloses detecting changes in flesh tone for image analyze of important scenes or story segments (Page 4, paragraph 0028). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Abecassis in view of Legall to encode tags and markers by detecting changes

in flesh tone (Page 4, paragraph 0028) as taught by Elenbaas in order to improve search and retrieve techniques for interest in television program (Page 1, paragraph 0008) as disclosed by Elenbaas.

Regarding Claim 37, Abecassis and Legall disclose all the limitations of Claim 19. Abecassis and Legall are silent on video stream comprise delayed signal that is sent to the STB at a viewer's premises. Elenbaas discloses that the plurality of video segments in the video stream comprise delayed signal that is sent to the STB at a viewer's premises (Page 6, paragraph 0040). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Abecassis in view of Legall that the video segments in the video stream comprise delayed signal that is sent to the STB at a viewer's premises (Page 6, paragraph 0040) as taught by Elenbaas in order to improve search and retrieve techniques for interest in television program (Page 1, paragraph 0008) as disclosed by Elenbaas.

16. Claims 30, 32 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Legall as applied to claim 19 above, and further in view of Ahmad et al (US 6,880,171 and hereafter referred to as "Ahmad").

Regarding Claims 30 and 34, Abecassis and Legall disclose all the limitations of Claim 19. Abecassis and Legall are silent on encoding tags and markers detecting changes in audio including music within the video stream. Ahmad discloses detecting changes in audio levels including music (Column 25, lines 17-40). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made

to modify Abecassis in view of Legall to encode tags and markers by detecting changes in audio levels including music (Column 5, lines 17-25) as taught by Ahmad in order to categorize and organize segments of information (Column 1, lines 39-62) as disclosed by Ahmad.

Regarding Claim 32, Abecassis and Legall disclose all the limitations of Claim 19. Abecassis and Legall are silent on markers inserted to indicate the division between the video segments and tags inserted to indicate content by automatic detection of changes in color within the video stream. Ahmad discloses that markers inserted to indicate the division between the video segments and tags inserted to indicate content by automatic detection of changes in color within the video stream (Column 16, lines 37-53). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Abecassis in view of Legall to insert markers to indicate the division between the video segments and insert tags to indicate content by automatic detection of changes in color within the video stream (Column 16, lines 37-53) as taught by Ahmad in order to categorize and organize segments of information (Column 1, lines 39-62) as disclosed by Ahmad.

17. Claims 31 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Legall as applied to claim 19 above, and further in view of Gove (5,099,322).

Regarding Claim 31, Abecassis and Legall disclose all the limitations of Claim 19. Abecassis and Legall are silent on the video stream being encoded based on

detection of changes in light levels. Gove discloses that each video segment is defined by automatic detection of changes in light level within the video stream (Column 3, lines 1-16). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Abecassis in view of Legall to insert markers to indicate the division between the video segments and insert tags to indicate content by automatic detection of changes in light levels within the video stream (Column 3, lines 1-16) as taught by Gove in order to analyze the scene changes in a video signal (Column 1, lines 65-68) as disclosed by Gove.

Regarding Claim 35, Abecassis and Legall disclose all the limitations of Claim 19. Abecassis and Legall are silent on the video stream being encoded based on detection of scene changes. Gove discloses that each video segment is defined by automatic detection of changes in scenery (Column 3, lines 13-21). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Abecassis in view of Legall to insert markers to indicate the division between the video segments is defined by automatic detection of changes in scenery (Column 3, lines 13-21) as taught by Gove in order to analyze the scene changes in a video signal (Column 1, lines 65-68) as disclosed by Gove.

18. Claims 42, 43, 45, 46, 49-51, 56-58, 64, 65, 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Kwoh and Legall.

Regarding Claim 42, Abecassis discloses a system for selecting one of an encoded regular video stream that is encoded with tags and markers (Column 7, lines

8-26, Column 8, lines 39-52), and an alternate video stream that has been encoded with tags and markers (Column 5, lines 5-12, Column 7, lines 8-26, Column 8, lines 39-52) comprising: a comparator, that receives the tags and markers and video preferences (Figure 5, 621), which compares the tags and markers and viewer preferences to select the preferred video segments and exclude the unwanted video segments or the regular video stream and the alternate video stream (Column 7, lines 8-26, Column 8, lines 39-52, Column 10, lines 10-16), a storage device coupled to the comparator that stores viewer preferences (Figure 5, 651), a filter/switch (Figure 1, 603), coupled to the comparator that uses comparison data to generate a request signal for alternate video segments (Column 13, lines 56-65) and a video on demand system that receives the request signal for the alternate video segments and send the alternate video segments to the filter/switch (Column 13, lines 56-67, Column 14, lines 1-15) sends the alternate video segments to the fliter/swich (Figure 1, 603), a set top box (STB) that receives the encoded video stream and separates the tags and markers from the encoded video stream to generate an un-encoded video stream (Figure 5, 623, 622, 633) and that the keywords based on the category or subject matter of segments in order to retrieve the segments (Column 7, lines 16-26). Abecassis is silent on a video blanking interval decoder that separates the tags and markers from the encoded video stream to generate an un-encoded video stream (Figure 5, 623, 622, 633) and the key words of video stream based on information from an EPG. Kwoh discloses a method of selecting preferred video segments and excluding unwanted video segments from a plurality of video segments within a video stream (Figure 26) comprising: encoding

markers within the video stream (Column 13, lines 33-64, Figure 23, 664, 668 Figure 24, 684, 688, 693, 694), the markers having a position in the video stream that indicates a division between the plurality of video segments of the video stream (Figure 23, 664, 668 Figure 24, 684, 688, 693, 694); encoding tags within the video stream that indicate content of each video segment (Column 13, lines 33-64, Figure 21); using video preference information of the viewer to select the preferred video segments and exclude the unwanted video segments by comparing the tags with the video preference information of the viewer (Figure 26). Kwoh discloses a video blanking interval decoder that separates the tags and makers from the regular video stream (Figure 25, 706, 708). Legall discloses that the keywords or tags of a program are based on information from an EPG as a user allowed to search for programs or listings based on the keywords (Column 3, lines 28-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Abecassis to a video blanking interval decoder that separates the tags and makers from the regular video stream (Figure 25, 706, 708) as taught by Kwoh in order to provide parental control on all broadcasts and transmissions to a STB (Column 1, lines 14-16, 55-57) as disclosed by Kwoh. Therefore, it would have been obvious to one of ordinary skill in the art to modify Abecassis to include that key words of video stream based on information from an EPG (Column 3, lines 28-55) as taught by Legall in order to provide a more efficient tool of allowing a user to search and watch items of interest (Column 1, lines 30-32) as disclosed by Legall.

Regarding Claims 64 and 65, Abecassis discloses a system and method of selecting preferred video segments and excluding unwanted video segments from a plurality of video segments within a video stream (Column 7, lines 16-26) comprising: an encoder that encoding markers within the video stream (Column 7, lines 28-67, Column 8, lines 1-26, 39-45), the markers having a position in the video stream that indicates a division between the plurality of segment of the video stream (Column 8, lines 39-45) and the encoder encodes tags within the video stream that indicated content of each video segment, the tags comprise selected key words relating to the content of the video stream (Column 7, lines 8-15, 28-67, Column 8, lines 1-26, 39-45) as the tags and markers are encoded for the video stream, a set top box (STB) that receives the encoded video stream and separates the tags and markers from the encoded video stream to generate an un-encoded video stream (Figure 5, 623, 622, 633) a video databases, coupled to the STB , that stores the un-encoded video stream (Figure 5, 611, 612), and a comparator, coupled to the STB, that receives the tags and markers and video preferences (Figure 5, 621), which points to locations of video segments to select the preferred video segments and exclude the unwanted video segments by comparing key words with the video preference information of the viewer (Column 7, lines 8-26, Column 8, lines 39-52, Column 10, lines 10-16). Abecassis discloses video transmissions including the news (Column 1, lines 55-63) and that the keywords based on the category or subject matter of segments in order to retrieve the segments (Column 7, lines 16-26). Abecassis is silent on encoding markers within the video stream during live transmission of the video stream and the key words of video stream

based on information from an EPG. Kwoh discloses a method of selecting preferred video segments and excluding unwanted video segments from a plurality of video segments within a video stream (Figure 26) comprising: encoding markers within the video stream during live transmission (Column 13, lines 33-64, Figure 23, 664, 668 Figure 24, 684, 688, 693, 694), the markers having a position in the video stream that indicates a division between the plurality of video segments of the video stream (Figure 23, 664, 668 Figure 24, 684, 688, 693, 694); encoding tags within the video stream during live transmission that indicate content of each video segment (Column 13, lines 33-64, Figure 21); using video preference information of the viewer to select the preferred video segments and exclude the unwanted video segments by comparing the tags with the video preference information of the viewer (Figure 26). Legall discloses that the keywords or tags of a program are based on information from an EPG as a user allowed to search for programs or listings based on the keywords (Column 3, lines 28-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Abecassis to include encoding tags and markers within the video stream during live transmission that indicate content of each video segment (Column 13, lines 33-64, Figure 21) as taught by Kwoh in order to provide parental control on all broadcasts and transmissions to a STB (Column 1, lines 14-16, 55-57) as disclosed by Kwoh. Therefore, it would have been obvious to one of ordinary skill in the art to modify Abecassis to include that key words of video stream based on information from an EPG (Column 3, lines 28-55) as taught by Legall in order to provide

a more efficient tool of allowing a user to search and watch items of interest (Column 1, lines 30-32) as disclosed by Legall.

Regarding Claim 43, Abecassis, Kwoh and Legall disclose all the limitations of Claim 42. Abecassis discloses a controller or microprocessor, which generates control signals or program (Figure 5, 603, 621) and a switcher (Figure 5, 631) to generate the video stream and alternate video stream (Figure 5, 611, 612). Kwoh discloses a video source that generates multiple video sources (Column 13, lines 21-22).

Regarding Claim 45, Abecassis, Kwoh and Legall disclose all the limitations of Claim 43. Kwoh discloses that video stream source comprises a video tape bank (Figure 20, 10006).

Regarding Claim 46, Abecassis, Kwoh and Legall disclose all the limitations of Claim 43. Kwoh discloses that video stream source comprises a receiver for receiving a remote video from a remote source (Figure 1, 10017, 10016, Column 13, lines 21-22).

Regarding Claim 49, Abecassis, Kwoh and Legall disclose all the limitations of Claim 43. Abecassis discloses alternate video stream comprises alternate selection of video that replaces excluded video segments (Column 5, lines 5-12, Column 7, lines 8-26, Column 8, lines 39-52, Column 10, lines 10-16).

Regarding Claim 50, Abecassis, Kwoh and Legall disclose all the limitations of Claim 42. Kwoh discloses that an alternate video slate is applied to the filter/switch (Figure 26, 750, Figure 31a, Figure 31b) and having alternate video slate displayed (Figure 32), which reads on an alternate video slate generator generating an alternate video slate signal.

Regarding Claim 51, Abecassis, Kwoh and Legall disclose all the limitations of Claim 42. Abecassis discloses a back channel transmitting a request of alternate segments (Column 14, lines 50-64).

Regarding Claim 56, Abecassis, Kwoh and Legall disclose all the limitations of Claim 51. A back channel comprises an asymmetric system that uses standard telecommunication systems as described in the applicant's specification. Abecassis discloses that a user can demand programming via a back channel that uses standard telecommunications systems (Column 14, lines 50-64). Kwoh discloses that video stream source comprises a video tape bank or an asymmetric system (Figure 20, 10006). The combination of Abecassis and Kwoh provides for the back channel to connect to a video tape bank or asymmetric system (Figure 20, 10006) as taught by Kwoh in order to provide television and videos for viewers with selective programming interests to block all offensive material (Column 1, lines 19-40) as disclosed by Kwoh.

Regarding Claim 57, Abecassis, Kwoh and Legall, disclose all the limitations of Claim 50. Abecassis discloses that the back channel comprises a cable (Column 14, lines 3-5).

Regarding Claim 58, Abecassis, Kwoh and Legall disclose all the limitations of Claim 42. Abecassis disclose a television (TV) monitor (Figure 1, 617) coupled to a filter/switch that receives segments from the filter/switch and displays the segments (Figure 5, 603, 611).

Regarding Claim 71, Abecassis, Kwoh and Legall disclose all the limitations of Claim 64. Abecassis discloses that excluding the video segments by selecting the

alternate video that replaces excluded segment in the video stream or parallel segment (Column 10, lines 10-16), which have been excluded by the server (Column 13, lines 57-67, Column 14, lines 1-2, Column 15, lines 63-67, Column 16, lines 1-12).

19. Claims 44, 54, 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Kwoh and Legall as applied to claims 42 above, and further in view of Rosser (US 6,446,261).

Regarding Claim 44, Abecassis, Kwoh and Legall disclose all the limitations of Claim 43. Abecassis, Kwoh and Legall are silent on a stream source comprises studio cameras that generate video streams. Rosser discloses a video on demand system (Figure 1, 14, 26) that uses comparison data to generate a request signal for the alternate video segments or the insertions/advertisements do not fall with the profile causing a default advertisement to be requested for display (Column 7, lines 46,56, Column 13, lines 33-41). Rosser discloses a video content provider (Figure 1, 14) comprising a video stream source that generates multiple video sources (Figure 1, 14, 12). Rosser discloses that the video provider produces a signal which is sent to a central studio for further processing prior to rebroadcast and that the central studio can insert all video alternate signals for distribution (Column 7, lines 1-20), which reads on the studio containing switcher that receives control signals to generate broadcast video stream and an alternate video stream. It would have been obvious that particular control signals are sent to the central studio from the video provider so that processing occur, which would then include a controller that generates control signals. Rosser

discloses that the video stream source comprises studio cameras that generate video streams (Figure 1, 11). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Abecassis in view of Legall to include video stream source comprises studio cameras that generate video streams (Figure 1, 11) as taught by Rosser in order to seamlessly insert adverting and other indicia seamlessly (Column 1, lines 19-29) as disclosed by Rosser.

Regarding Claim 54, Abecassis, Kwoh and Legall disclose all the limitations of Claim 50. Abecassis, Kwoh and Legall are silent on alternate video signal can be advertisements. See rejection of Claim 44. Rosser discloses that the alternate video stream comprises an alternate selection of video that replaces excluded video segments (Column 13, lines 33-41). Rosser discloses that the alternate video slate signal can be advertisements (Column 13, lines 49-59). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Abecassis in view of Legall to include alternate video slate signal can be advertisements (Column 13, lines 49-59) as taught by Rosser in order to seamlessly insert adverting and other indicia seamlessly (Column 1, lines 19-29) as disclosed by Rosser.

Regarding Claim 55, Abecassis, Kwoh and Legall disclose all the limitations of Claim 50. Abecassis, Kwoh and Legall are silent on alternate video signal can be advertisements. See rejection of Claim 44. Rosser discloses that the alternate video slate signal can be any standard displays (Column 12, lines 17-34, Column 13, lines 49-59). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Abecassis in view of Legall to include alternate video

slate signal can be any standard displays (Column 12, lines 17-34, Column 13, lines 49-59) as taught by Rosser in order to seamlessly insert adverting and other indicia seamlessly (Column 1, lines 19-29) as disclosed by Rosser.

20. Claims 47 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Kwoh and Legall as applied to claim 43 above, and further in view of Cobbley et al (US 5,614,940 and hereafter referred to as "Cobbley").

Regarding Claim 47, Abecassis, Kwoh and Legall disclose all the limitations of Claim 43. Abecassis, Kwoh and Legall are silent on a marker generator, computer generating tag information. Cobbley discloses that the markers are generated (Column 3, lines 60-67, Column 4, lines 1-7, Figure 3, 305), which would mean that the system inherently includes a marker generator. Cobbley discloses that a computer or the broadcast receiver (Figure 1, 110, Figure 5) generates custom tag information (Column 4, lines 39-45), by utilizing a speech recognition process (Column 4, lines 39-45, Column 8, lines 16-25), which reads on voice recognition software, coupled to the computer or the broadcast receiver and capture device (Figure 1, 110, 115), tag storage that stores the custom tag information (Figure 1, 125), keyboard to enter information (Column 15, lines 1-10), a cursor control device or an alphanumeric input device. It would have been obvious for the input device to be a remote control as a remote control can activate the cursor. The receiver can generate the necessary tags based on broadcast information such as title or subject matter keywords (Column 4, lines 3-6, 39-45), which can include inputting information and commands via an input device (Column

14, lines 23-45). It would have been obvious for the use of input device to generate tag information. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Abecassis in view of Kwoh and Legall to include a marker generator (Figure 3, 305), a computer that generates custom tag information (Column 4, lines 30-45) using a voice recognition software, coupled to the computer (Column 8, lines 16-25), tag storage to store the tag information (Figure 1, 125, 128, 130), a keyboard and a remote control to generate custom tag information (Column 15, lines 1-10) as taught by Cobbley in order to provide video and audio information of interest to users in an indexed manner (Column 1, lines 8-11, 31-36) as disclosed by Cobbley.

Regarding Claim 48, Abecassis, Kwoh, Legall and Cobbley disclose all the limitations of Claim 47. Abecassis discloses that video streams are encoded with tags and markers (Column 7, lines 8-2, Column 8, lines 1-26, 39-45). Abecassis discloses a controller or microprocessor, which generates control signals or program (Figure 5, 603, 621) and a switcher (Figure 5, 631) to generate the video stream and alternate video stream (Figure 5, 611, 612, Column 5, lines 5-12, Column 7, lines 8-26, Column 8, lines 39-52). Cobbley discloses a video blanking interval encoder (Figure 1, 115), coupled to the marker generator (Figure 1, 105) and the computer (Figure 1, 110) and the remote control (Column 15, lines 1-10) and the keyboard (Column 15, lines 1-10) and the voice recognition software (Column 4, lines 30-45, Column 8, lines 16-25) and the tag storage, that receives the markers and the tags (Figure 1, 125, 128, 130), and encoded streams are sent to a headend (Figure 1, 125).

21. Claims 52 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Kwoh and Legall as applied to claim 50 above, and further in view of Reilly et al (US 5,740,549 and hereafter referred to as "Reilly").

Regarding Claim 52, Abecassis, Kwoh and Legall disclose all the limitations of Claim 50. Abecassis, Kwoh and Legall are silent on the alternate video slate signal comprising a screen saver. Reilly discloses a signal comprising a screen saver based on viewer preferences (Column 11, lines 40-52). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Abecassis in view of Kwoh and Legall to have the alternate video slate signal comprise a screen saver (Column 11, lines 40-52) as taught by Reilly in order to provide information to viewers matching viewers' interest (Column 1, lines 1-10) as disclosed by Reilly.

Regarding Claim 53, Abecassis, Kwoh and Legall disclose all the limitations of Claim 50. Abecassis, Kwoh and Legall are silent on the alternate video slate signal comprising wallpaper. Reilly discloses a signal comprising wallpaper based on viewer preferences (Column 10, lines 19-34). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Abecassis in view of Kwoh and Legall to have the alternate video slate signal comprise a screen saver (Column 10, lines 19-34) as taught by Reilly in order to provide information to viewers matching viewers' interest (Column 1, lines 1-10) as disclosed by Reilly.

22. Claim 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Maybury and Legall.

Regarding Claim 63, Abecassis discloses a method of selecting preferred video segments and excluding unwanted video segments from a plurality of video segments within a video stream (Column 7, lines 16-26) comprising: encoding markers within the video stream (Column 7, lines 28-67, Column 8, lines 1-26, 39-45), the markers having a position in the video stream that indicates a division between the plurality of segment of the video stream (Column 8, lines 39-45) and encoding tags within the video stream that indicated content of each video segment, the tags comprise selected key words relating to the content of the video stream (Column 7, lines 8-15, 28-67, Column 8, lines 1-26, 39-45) using video preference information to select the preferred video segments and exclude the unwanted video segments by comparing key words with the video preference information of the viewer (Column 7, lines 8-26, Column 8, lines 39-52, Column 10, lines 10-16). Abecassis discloses that the keywords based on the category or subject matter of segments in order to retrieve the segments (Column 7, lines 16-26). Abecassis is silent on markers and tags by using voice recognition and the key words of video stream based on information from an EPG. Maybury discloses encoding markers within a video stream (Column 9, lines 42-67, Column 10, lines 1-21, 34-48) which indicates a division between a plurality of segments (Column 9, lines 42-67, Column 10, lines 1-21, 34-48) by using voice recognition (Column 10, lines 33-40) and encoding tags comprising keywords (Column 16, lines 48-56) by using voice recognition (Column 18, lines 38-67). Legall discloses that the keywords or tags of a program are based on information from an EPG as a user allowed to search for programs or listings based on the keywords (Column 3, lines 28-55). Therefore, it

would have been obvious to one of ordinary skill in the art to modify Abecassis to include markers (Column 9, lines 42-67, Column 10, lines 1-21, 34-48) by using voice recognition (Column 10, lines 33-40) and encoding tags (Column 16, lines 48-56) by using voice recognition (Column 18, lines 38-67) as taught by Maybury in order to provide a more efficient tool of allowing a user to catalog and search multimedia information which is more accurate (Column 1, lines 54-67) as disclosed by Maybury. Therefore, it would have been obvious to one of ordinary skill in the art to modify Abecassis to include that key words of video stream based on information from an EPG (Column 3, lines 28-55) as taught by Legall in order to provide a more efficient tool of allowing a user to search and watch items of interest (Column 1, lines 30-32) as disclosed by Legall.

23. Claims 67, 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Legall as applied to claim 19 above, and further in view of Elenbaas and Ahmad.

Regarding Claims 67 and 68, Abecassis and Legall disclose all the limitations of Claims 19 and 1 respectively. Abecassis and Legall are silent on encoding tags and markers detecting changes in flesh tone and detecting changes in audio including music within the video stream. Elenbaas discloses detecting changes in flesh tone for image analyze of important scenes or story segments (Page 4, paragraph 0028). Ahmad discloses detecting changes in audio levels including music (Column 25, lines 17-40). Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify Abecassis in view of Legall to encode tags and markers by detecting changes in flesh tone (Page 4, paragraph 0028) as taught by Elenbaas in order to improve search and retrieve techniques for interest in television program (Page 1, paragraph 0008) as disclosed by Elenbaas. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Abecassis in view of Legall to encode tags and markers by detecting changes in audio levels including music (Column 5, lines 17-25) as taught by Ahmad in order to categorize and organize segments of information (Column 1, lines 39-62) as disclosed by Ahmad.

## ***Conclusion***

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Farzana E. Hossain whose telephone number is 571-272-5943. The examiner can normally be reached on Monday to Friday 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on 571-272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

FEH
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